UNITED STATES DISTRICT COURT
EASTERN DISTRICT OF MICHIGAN
SOUTHERN DIVISION

JERRY KIRSCH, individually and as Co-Trustee of the JERRY KIRSCH LIVING TRUST, and KATHLEEN KIRSCH, as Co-Trustee of the JERRY KIRSCH LIVING TRUST,

Plaintiffs,

v. **HONORABLE DENISE PAGE HOOD**

AOE RICOH, Inc., a wholly-owned Subsidiary of RICOH CORPORATION and SAVIN CORPORATION, **Case No. 00-CV-72773-DT**

TOSHIBA AMERICA BUSINESS SOLUTIONS, INC., **Case No. 00-CV-72774-DT**

CANON USA, INC. and CANON COMPUTER SYSTEMS, INC., **Case No. 00-CV-72775-DT**

XEROX CORPORATION and SAMSUNG ELECTRONICS CO., LTD, an intervenor, **Case No. 00-CV-72778-DT**

Defendants.
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MEMORANDUM OPINION AND ORDER

I. BACKGROUND

Plaintiffs filed the instant action against various Defendants alleging that Defendants infringed Plaintiff's U.S. Patent No. 4,816,911 (the '911 patent). The '911 patent contains six claims. Only Claim 1 is at issue in this motion.

Kirsch Technologies, Inc. ("KTI") obtained the '911 patent on June 13, 1989. The device disclosed in Plaintiffs' '911 patent includes an "information station" or switching device with three telephone-line type ports for use with a conventional facsimile ("fax") machine. The information

station converts paper documents into digital images, stores those digital images, retrieves them on command, and prints them on command. The information station was invented to use with a personal computer ("PC") and an off-the shelf fax machine. The information station allows the user to scan data into the computer and print data from the computer. The information station allows someone who already had a PC to buy a fax machine and plug it into the PC with no modification required to the PC or the fax machine. The only additional equipment needed was the information station or switch box to connect the personal computer and the fax.

The information station or switching device uses standard connectors so that no modification to the personal computer or the fax is necessary. The fax machine plugs into a first port or telephone jack of the information station. The modem of a personal computer plugs into the second port or telephone jack of the information station. The external telephone line plugs into the third port or telephone jack of the information station.

The information station has three states. The first switching state allows the modem of the computer to perform its standard function of communicating with the external telephone line. This communication involves the second (PC port) and third (external telephone line) ports.

The second switching state allows the fax machine to perform its standard function of communicating with the external telephone line to receive or transmit documents. This communication is between the first (fax port) and the third (external telephone line) ports.

The third switching state allows the modem of the personal computer to communicate with the fax machine. This allows the fax machine to perform as either a printer or a scanner for the PC. The modem of the PC is communicating with the modem of the fax machine (or "transceiver"). In order to activate the fax machine to operate as a printer while in the third switching state, the fax

machine is “tricked” to believing that it is connected to the external telephone line via the third port and receiving an incoming telephone call. The ‘911 patent simulated the telephone connection by including circuitry that operated to create the illusion that the fax machine is receiving an incoming telephone signal.

On October 8, 2004, the Court issued its claim construction opinion. This matter is before the Court on the remaining Defendants’ Joint Motion for Summary Judgment. A response, reply and sur-reply have been filed and a hearing was held on the matter.

II. ANALYSIS

A. Summary Judgment Standard

Rule 56(c) provides that summary judgment should be entered only where "the pleadings, depositions, answers to the interrogatories, and admissions on file, together with affidavits, if any, show that there is no genuine issue as to any material fact and that the moving party is entitled to a judgment as a matter of law." The presence of factual disputes will preclude granting of summary judgment only if the disputes are genuine and concern material facts. *Anderson v. Liberty Lobby, Inc.*, 477 U.S. 242, 248 (1986). A dispute about a material fact is "genuine" only if "the evidence is such that a reasonable jury could return a verdict for the nonmoving party." *Id.*

Although the Court must view the motion in the light most favorable to the nonmoving party, where "the moving party has carried its burden under Rule 56(c), its opponent must do more than simply show that there is some metaphysical doubt as to the material facts." *Matsushita Electric Industrial Co. v. Zenith Radio Corp.*, 475 U.S. 574, 586 (1986); *Celotex Corp. v. Catrett*, 477 U.S. 317, 323-24 (1986). Summary judgment must be entered against a party who fails to make a showing sufficient to establish the existence of an element essential to that party's case, and on

which that party will bear the burden of proof at trial. In such a situation, there can be "no genuine issue as to any material fact," since a complete failure of proof concerning an essential element of the nonmoving party's case necessarily renders all other facts immaterial. *Celotex Corp.*, 477 U.S. at 322-23.

B. Infringement Analysis

A two-step analysis is required to determine infringement. *Ethicon Endo-Surgery, Inc. v. U.S. Surgical Corp.*, 149 F.3d 1309, 1315 (Fed. Cir. 1998). First, the claim must be properly construed to determine its scope and meaning. Second, the claim as properly construed must be compared to the accused device or process. *Id.* The first step, claim construction, is a question of law which the Federal Circuit reviews de novo. *Id.*; *Markman v. Westview Instruments, Inc.*, 52 F.3d 967, 979-81 (Fed. Cir. 1995)(*en banc*). The second step of the infringement analysis, determining whether a particular device infringes a properly construed claim, is a question of fact. *Ethicon*, 149 F.3d at 1315. The second step analysis is amenable to summary judgment if no reasonable fact finder could find infringement. *Id.*; *Warner-Jenkinson Co., Inc. v. Hilton Davis Chem. Co.*, 520 U.S. 17 (1997).

Plaintiffs in this case claim that under the doctrine of equivalence Defendants' accused devices infringed Plaintiffs' '911 patent. Specifically, Plaintiffs argue that under the "insubstantial differences" approach, Defendants' accused devices infringe their patent.

Under a doctrine of equivalents infringement claim, the essential inquiry is: "Does the accused product or process contain elements identical or equivalent to each claimed element of the patented invention?" *Warner-Jenkinson*, 520 U.S. at 40. There are two tests used to determine equivalence. One test is the "triple identity" test which focuses on the: 1) function served by a

particular claim element; 2) the way that element serves that function; and 3) the result obtained by that element. *Id.* at 39. The second test which has been used is the "insubstantial differences" approach. *Id.* The "triple identity" test may be a suitable method for analyzing mechanical devices but may not be suitable for analyzing other products or processes. *Id.* The "insubstantial differences" approach used in other products or processes offers little additional guidance as to what might render any given difference "insubstantial." *Id.* at 40. Determining which framework to use depends on the particular facts. *Id.* A focus on individual elements and a special vigilance against allowing the concept of equivalence to eliminate completely any such elements should reduce the imprecision of whatever language is used. *Id.* An analysis of the role played by each element in the context of the specific patent claim will inform the inquiry as to whether a substitute element matches the function, way, and result of the claimed element, or whether the substitute element plays a substantially different role from the claimed element. *Id.* An objective inquiry is used on an element-by-element basis. *Id.* Whether a component in the accused subject matter performs substantially the same function as the claimed limitation in substantially the same way to achieve substantially the same result may be relevant to this determination. *Id.*

C. Accused Devices

1. TABS Facsimile Products

Toshiba America Business Solutions, Inc. ("TABS") sells a line of facsimile machines (transceivers) commonly referred to as "multi-function products" ("MFPs") because they are capable of faxing and printing documents from an attached computer, and scanning documents into an attached computer. Def.'s Br. at 5, citing Rosso Decl. ¶¶3, 9-10, Exhs. 2, 4, and 5.

All of the TABS products carry the same basic structure and operation which Defendant

TABS argues is "far different from the 'Information Station' described and claimed in the '911 patent. *Id*. Defendant argues that these differences center around the fact that a system comprised of a TABS MFP and computer has no switch of any kind: the computer connects directly to the MFP via a serial or parallel computer cable for two-way data exchange, and the MFP then connects directly to the phone line using a telephone cord to send and receive facsimile data. *See* Sturges Decl. ¶¶32-35.

Defendant TABS also argues that Plaintiffs' own arguments indicate that the requisite equivalence is lacking in their accused device. Specifically, Defendant TABS points to: 1) Plaintiffs' statements that the TABS MFP "switches" between its various functions by means of a "switching circuit comprising integrated circuits [or integrated circuits and associated conductors]" on printed circuit boards within the MFP rather than "electromechanical switches;" 2) that the claimed "switching circuit includes a first port or connection to additional components configured to perform the functions of a facsimile transceiver" and a "second port connected to the serial or parallel port of the computer" rather than a telephone-compatible socket into which a telephone line may be plugged; and 3) that the switching circuit includes a third port connected to a telephone line." *See* Rosso Decl ¶¶ 4-8, Exh. 3.

Defendant TABS argues that Plaintiffs' own claim charts indicate that the "switching means" of the accused TABS products do not meet the Switching Means Limitations of the '911 patent as construed by this Court. Specifically, Defendant TABS points out that where Plaintiffs' claim charts indicate that the "switching means" of the accused TABS products are within the MFP, the "switching means" cannot be "separate and distinct;" where Plaintiffs' claim chart indicates the switching means of the accused devices have "ports" which connect to either components within the

facsimile machine or to the serial or parallel cables of the computer, Defendant TABS argues that these cannot be sockets into which telephone-compatible lines can be plugged. Where Plaintiffs' claim charts indicate that the accused devices have a switching means comprised of integrated circuits and associated conductors, Defendant TABS argues that these cannot be electro-mechanical switches.

2. Ricoh Facsimile Products

The Ricoh Defendants (AOE Ricoh, Inc. and Savin Corporation) sell a line of multi-function products (MFPs) that are facsimile machines (and some facsimile machines and copy machines) that can be connected to a personal computer ("PC") to be used as printers, scanners and facsimile machines. *See* Trainor Decl. ¶¶3, 9-10, Exhs. 2, 4, 5. The FAX2700L is a "laser plain paper facsimile" and one such accused MFP. The FAX2700L can be equipped with the Ricoh RS-22 PC-Fax Expander, allowing the FAX2700L "the ability to send and receive fax messages directly from" a PC, "broadcast documents and data files" on a PC and "transmit them...[One] can [also] scan document for use in other PC applications, or for document archiving purposes." *See* Trainor Decl. ¶9, Exh. 4; ¶10, Exh. 5.

As with the TABS products, the Ricoh Defendants' MFPs have the same basic structure and operation, which the Ricoh Defendants argue is quite different from the "Information Station" described and Claimed in the '911 patent. The Ricoh Defendants argue that a system which includes one of their accused MFPs and a PC has no switch of any kind which is "separate and distinct from either the computer or the facsimile." Rather, the Ricoh Defendants state that a PC can connect directly to the MFP by a serial or parallel computer cable, and the MFP connects directly to the phone line.

The Ricoh Defendants also argue that Plaintiffs' own description of the accused Ricoh products belies their argument for a finding of infringement. Defendants state that, according to Kirsch, the MFP "switches" between performing the various operations by means of a "switching circuit comprising integrated circuits and conductors," rather than electromechanical switches on the facsimile control unit or FCU board (a printed circuit board within the MFP). *See* Trainor Decl. ¶¶4-7, Exh. 3. The Ricoh Defendants also argue that, according to Kirsch, "the switching circuit includes a first port or connection to additional components configured to perform the functions of a facsimile transceiver" rather than a telephone-compatible socket into which a telephone line may be plugged, and "the switching circuit includes a second port connected to the serial or parallel port of the computer" rather than a telephone-compatible socket into which a telephone line maybe plugged, and "the switching circuit includes a third port connected to a telephone line." *See* Trainor Decl ¶¶4-8, Exh. 3.

Defendant Ricoh concludes that Plaintiffs' own claim charts described the "switching means" of the accused MFPs as: 1) within the MFPs, which Defendant Ricoh argues means that they are not "separate and distinct" from the facsimile machine; 2) have "ports," not sockets into which a telephone compatible line can be plugged, that connect components within the MFP or to the serial or parallel cables of the computer; and 3) are comprised of integrated circuits and conductors, which are not electromechanical switches. Defendant Ricoh argues that these differences indicate that the Switching Means Limitation of the '911 patent as construed by this Court is not met by their accused devices.

3. Canon Products

As with TABS, and the Ricoh Defendants, Canon makes MFPs which can be connected to a PC and used as a printer, scanner, and fax machine.[1] *See* Sarkis Decl. ¶4. These products also connect to a PC via serial or parallel cable or through a network Ethernet interface (i.e. 10baseT or 100baseTX interface). Scanned data is sent from the MFP to a PC through a serial, parallel or network cable, and print data is sent from the PC to the MFP over the same cables. The MFP connects directly to the telephone line via a telephone cord (*Id*.) over which the MFP can send information-both information from the PC as well as standard facsimile data. The MFP can also receive data over the serial, parallel or network cable from the PC and act as a printer for the PC. The MFP can also scan a document and send the information over the serial, parallel or network cable to the PC for storage. *See* Sarkis Decl. ¶5.

Defendant Canon also relies on Plaintiffs' description of their products as supporting a finding of no infringement. According to Kirsch, Defendant Canon argues, the MFP "switches"

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[1]According to Defendant Canon, the exceptions are the accused GP30F and the FAX L790 products, and the newly identified MultiPASS F60, imageRUNNER5020 and imageRUNNER 5020i. The GP 30F is a copy machine that can be connected though a serial cable to a MultiDevice Controller ("MDC"), and the MDC can then be connected to a PC through a serial or network cable. *See* Sarkis Decl. ¶ 6. An MDC is a device containing circuit board which, when connected to the GP30F and a PC allow the system to be used as a printer, scanner, and facsimile machine. *Id*. The FAX L790 is an ordinary stand-alone facsimile with no options available which would enable it to communicate with a computer. See *id*. ¶ 7. The FAX L790 cannot be used to print information received from a PC or send scanned information to a PC, and it cannot be used to perform PC faxing functions, as required by the '911 patent. *Id*. According to Defendant, since the FAX L790 is not capable of performing these functions, it has no need for –and does not include– any switching device for switching between these functions. *Id*. Finally, Defendant states that the MultiPASS F60 and imageRUNNER5020 are copy machines and have no facsimile capabilities. *Id*. ¶ 8. The imageRUNNER 5020i is the same as the imageRUNNER 5020 in all relevant respect, except it is capable of performing internet faxing, i.e. a form of faxing over the internet. *Id*. Unlike the other accused Canon MFPs, the MultiPASS F60, imageRUNNER 5020 and the imageRUNNER 5020i cannot be connected directly to a telephone line using a telephone cord. *Id*.

between performing the function of scanner, printer and fax machine by means of a "switching circuit comprising integrated circuits and associated conductors" on a printed circuit board(s) within the MFP. *Id.* at ¶11, Exh. 2-4. Defendant Canon, quoting Plaintiffs, states that "the switching circuit includes a first port or connection to additional components configured to perform the functions of a facsimile transceiver" and "the switching circuit includes a second port connected to" (1) "the [serial and/or parallel port of the computer" (*see id*. at ¶9, Exh. 2); (2) "the network through which the switching circuit is connected to the network connection of the computer" (*see id.*, Exh. 3); or (3) "the serial port of the computer through the network" (*see id*., Exh. 4). Def.'s Br. at 10. Defendant Canon also points out that Plaintiffs' claim charts state that "the switching circuit includes a third port connected to a telephone line." *See* Sarkis Decl. ¶9, Exh. 2-4.

Defendant Canon also argues that Plaintiffs' own description of the accused Canon products reveal that the switching means limitation of Claim 1, as interpreted by this Court, is not present.

4. Xerox Facsimile Products

Defendant Xerox Corporation addresses their accused devices in two groups according to two separate claim charts provided by Plaintiffs.

Plaintiffs allege that the '911 patent is infringed by the dex 795, Omnifax L525, Omnifax L630, Omnifax L8000, Omnifax L8500, and Omnifax Voyager when these machines are equipped with the optional RS232C circuit board (installed within the facsimile machine) and then connected directly to a PC via an RS232C serial cable. *See* Rheintgen Decl. ¶¶ 9, 10, Exh. 2, 3, 4, 5. Defendant Xerox argues that there is no switching means in their machines, especially not one which is "separate and distinct from either the computer or the facsimile," as this Court read Plaintiffs' claim to require. Defendant Xerox also points out that the RS232C cable connects a serial port of

the PC to a serial port on the RS232C circuit board inside the machine, that neither of these ports is capable of receiving a telephone line, and that the RS232C circuit board contains no electromechanical switches. *See* Rheingten Decl. ¶10, Exh. 5.

Defendant Xerox's second group of accused devices, including the Omnifax L545, functions as a printer, facsimile machine and copying device. According to Defendant Xerox, however, the L545 cannot communicate with the PC to permit the PC to send information as a fax via the L545, and the L545 cannot transmit scanned documents to the PC unless specific software has been installed onto the computer. *See* Rheintgen Decl. ¶¶ 12, 13, Exhs. 6, 7. Defendant Xerox also notes that the L545 employs a serial or port cable, not a telephone compatible line as required by this Court claim construction. *Id*.

Defendant Xerox also points out that the PC connects directly to the L545 via a serial or parallel cable (not a telephone compatible line) (*see id*.) and the L545, then, connects directly to the phone line. Xerox also argues that the L545 has no "separate and distinct" switch, and has no electromechanical switch, both requirements of Claim 1 of the '911 patent as interpreted by this Court. *Id*.

Defendant Xerox concludes, as did Defendants Canon and TABS, that the accused devices do not meet the Switching Means Limitations of the '911 patent as interpreted by this Court.

All four Defendants subscribe to the following arguments as addressing the material differences between the accused products and the '911 patent Switching Means Limitation.

D. Literal Infringement

Under *Litton Sys., Inc. v. Honeywell, Inc.*, 140 F.3d 1449, 1454 (Fed. Cir. 1998), "literal infringement requires that the accused device contain each limitation of the claim exactly; any

deviation from the claim precludes a finding of literal infringement." *Id.* Initially, Defendants argue that the accused facsimile products do not literally infringe Plaintiff's claims because the accused devices do not meet exactly the Claim 1 Switching Means Limitations as interpreted by this Court. Defendants argue that the accused devices connect directly to the PC without a separate and distinct switching means, as is required by the Claim 1, and so the accused devices do not literally infringe the Plaintiff's patent.

Additionally, Defendants argue the "switching circuitry" of the accused devices have no electromechanical switches as required by this Court's construction of Claim 1 of the '911 patent Def.'s Br. p. 14.

Lastly, Defendants argue that some of the connectors on the accused devices which Plaintiff identifies as "ports" are not sockets into which telephone-compatible lines can be connected as required under this Court's construction of Plaintiff's claim. According to Defendants, Plaintiffs concede that "the switching circuit includes a first port or connection to additional components configured to perform the functions of a facsimile transceiver" and "the switching circuit includes a second port connected to the serial or parallel port of the computer" and with respect to some of the Canon products, the network connection of the computer--none of which are telephone compatible sockets into which a telephone line may be plugged. *See* Def.'s Br. p. 14.

Plaintiffs do not respond to Defendants' arguments regarding literal infringement. The Court finds that the Defendants' accused products do not literally infringe Plaintiffs' Claim 1 and grants Defendants' Joint Motion for Summary Judgment as to literal infringement on Claim 1.

E. Doctrine of Equivalents

1. Defendants' Argument

Defendants argue that *Cooper Cameron Corp. v. Kvaerner Oilfield Prods., Inc.*, 291 F.3d 1317 (Fed. Cir. 2002) compels this Court to grant their motion for summary judgment because accepting plaintiff's application of the doctrine of equivalents would vitiate material claim elements and thereby violate the "all elements rule." On that basis, Defendants ask this Court to determine as a matter of law, that Defendants' "switching means" do not infringe Claim 1 of the '911 patent as construed by this Court.

In *Cooper Cameron*, the Federal Circuit agreed with the trial court's finding as a matter of law that, contrary to plaintiff's argument, there could be no infringement of its patent by the accused device under the doctrine of equivalents. The Federal Circuit reasoned that because "the workover port in [the defendant's] accused devices enters the wellhead assembly 'above' the two plugs, [this] cannot be equivalent to a connection 'between the two plugs.'" *Id.* at 1322. The Federal Circuit confirmed the trial court's view that the specific location of the connection relative to the wellhead assembly was a material limitation, and plaintiff's attempt to recharacterize their claim would read that limitation out of the claim, and thereby violate the all limitations rule. *Id.*

Defendants argue that *Cooper Cameron*, *supra*, indicates that Claim 1 of the '911 patent, interpreted by this Court to define a switch that is "separate and distinct from either the computer or the facsimile," cannot, as a matter of law, be equivalent to "circuitry within the fax machine."[2] *See* 10/8/04 Opinion, at 22. Defendants also point to this Court's definition of the switching means to include *electromechanical switches* to switch between *three states* and *three ports* that are each

[2]Defendants argue that for the purposes of the all-limitations rule, the relevant limitation is "not a switch per se, but a switch of a very specific construction that is placed between the fax and the computer." (Defs. Joint Motion, p. 17)

a socket into which *telephone-compatible lines* may be plugged. *See* 10/8/04 Opinion, at 17-21.

Defendants argue that Plaintiffs are trying to apply the doctrine of equivalents to read-out the limitations recited in Claim 1 of the '911 patent in violation of the all-limitations rule as described in *Moore U.S.A., Inc. v. Standard Register Co.*, 229 F.3d 1091 (Fed. Cir. 2000) and *Fin Control Sys. PTY, Ltd. v. OAM, Inc.*, 265 F.3d 1311 (Fed. Cir. 2001). *See also Cooper Cameron*, 291 F.3d at 1322. In *Moore, supra*, the Court of Appeals for the Federal Circuit affirmed summary judgment for the defendants, holding that the doctrine of equivalents could not be used so as to make an adhesive strip which covers only 47.8% of the length of an envelope equivalent to plaintiff's claims which required an adhesive strip covering a majority of the length of an envelope. *Id.* at 1106. The court stated, "[i]t would defy logic to conclude that a minority--the very antithesis of a majority--could be insubstantially different from a claim limitation requiring a majority, and no reasonable juror could find otherwise." *Id.* In *Fin Control*, the Federal Circuit affirmed summary judgment for the defendant because a product wherein engagement is from the front or rear of the formation cannot infringe a claim reciting "releasable means laterally engaging" and "applying lateral force to" a "side wall" of a "formation" because a finding of equivalence would "improperly read the 'lateral' and 'side' limitations out of [the claim]." *Id.* at 1316, 1320.[3]

Defendants argue that Plaintiffs are trying to convince this Court that two things which are opposite, are in fact equivalent. Defendants argue that the "switching means" of the accused

[3]Importantly, Plaintiffs distinguish *Cooper Cameron*, *Moore* and *Fin Control* from the case *sub judice* by indicating that in none of those cases did the plaintiff proffer expert opinion suggesting insubstantial difference between devices. This is an important point since the parties' expert witnesses have come to different conclusions regarding the existence of substantial differences between the accused devices and the claim limitations which suggests to this Court a genuine issue of material fact.

products is circuitry within the MFP and is thus the opposite of what is claimed and what Plaintiff specifically excluded from their claim's scope.[4] Supporting this argument, Defendants indicate that a "system" using Plaintiffs' device would require a user to purchase at least three devices, among them a switching device that is not circuitry within the fax machine. The fax machine and the computer are connected to each other and the switching device via telephone-compatible lines and ultimately the switching means is connected to the telephone line. This, Defendants argue, cannot be infringed by a system which consists of a computer directly connected to a fax machine which is then connected to the telephone line. Defendants argue that in a system including the accused devices, the material limitations of a switching means are not present.

Secondly, Defendants argue that the first switching state, which allows the computer to communicate with the phone line,[5] is missing from the accused MFPs so that only the MFP can communicate over or with the telephone line and so there can be no infringement under the doctrine of equivalents. Defendant argues that the switching means must employ three switching states allowing communication between the computer and the telephone line (switching state 1), between the fax machine and the telephone line (switching state 2), and a separate state to allow

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[4]Defendant Canon takes Plaintiffs' assertion that the switching means of Canon's GP 30F is in the MDC, not within the GP 30F and adds that it is not a electromechanical switch with sockets into which an external telephone compatible line may be plugged. (Def.'s Br. at 18, citing Sarkis Decl. ¶¶ 6, 9, 10, and 12, Exh. 2). Therefore, Defendant argues, *Cooper Cameron*, *Moore* and *Fin Control* all preclude a finding of infringement as to that product. Defendants argue that reading "electromechanical" to be equivalent to "circuits and conductors," and sockets into which telephone-compatible lines may be plugged as equivalent to serial, parallel or network cables would violate the all-limitations rule by reading out those material limitations of Claim 1.

[5] Defendants point to Plaintiffs' December 19, 2002 reply brief to Defendant Xerox's motion for summary judgment of invalidity of the '911 patent in view of the Xerox 295 Telecopier to show the materiality of the first switching state limitation.

communication between the computer and the fax machine (switching state 3). Defendants indicate that in system using one of the accused MFPs, in order for a user to send a message over the phone line using a computer, the computer must first send the message to the MFP in the alleged third "switching state," and the fax will then communicate over the telephone line in the alleged second "switching state." Noticeably missing, according to the Defendants, is the alleged first switching state which would allow direct communication between the computer and telephone line. Because there is no first switching state in the accused MFPs, Defendants argue that there can be no infringement under the doctrine of equivalents.[6]

Defendants' third argument is that the telephone-compatible sockets into which external devices (a computer, a fax machine, and a telephone line) may be plugged are absent from the accused devices, and preclude a finding of infringement under the doctrine of equivalents. Defendants argue that the alleged switching circuitry, an integral part of the fax machine, has not replaced the required ports with any sort of equivalent, but, has instead eliminated the need for such ports entirely and since this limitation is missing from the accused devices, there can be no infringement under the doctrine of equivalents.

Finally, Defendants argue that the accused "switching means" merely causes a change in operation, and does not change the actual connections among the various devices. Defendant argues that because this Court required the switching means to include electromechanical switches to

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[6]Plaintiffs, argue this section of Defendants' brief merely recites their previous argument regarding the placement of the switching means, and argues that in both the accused products and the switching means device of Claim 1, the computer communicates through the switching means to a telephone line, not through a fax machine as Defendants claim. Plaintiff argues that these are the sort of technological advances which the doctrine of equivalents was intended to protect. *See Chiuminatta Concrete Concepts, Inc. v. Cardinal Indus., Inc.*, 145 F.3d 1303, 1310 (Fed. Cir. 1998).

switch between the three states (thus creating the appropriate connection for the desired function) this limitation is also absent from the accused products.

2. Plaintiffs' Argument

a. Function-Way-Result Test

Initially, Plaintiffs argue that this Court should consider the nature of the doctrine of equivalents as a doctrine of equity. In *Graver Tank & Mfg. Co. v. Linde Air Prods. Co.*, 339 U.S. 605 (1950), the Supreme Court adhered to the doctrine of equivalents since "to permit imitation of a patented invention which does not copy every literal detail would be to convert the protection of the patent grant into a hollow and useless thing." *Id.* at 607; s*ee also Warner-Jenkinson*, 520 U.S. at 27-28. "To temper unsparing logic and prevent an infringer from stealing the benefit of the invention a patentee may invoke this doctrine to proceed against the producer of a device 'if it performs substantially the same function in substantially the same way to obtain the same result.'" *Graver Tank*, 339 U.S. at 608 (quoting *Sanitary Refrigerator Co. v. Winters*, 280 U.S. 30, 42 (1929)). The doctrine of equivalents "protect[s] the patentee from an infringer who appropriates the invention but avoids the literal language of the claims." *Martin v. Barber*, 755 F.2d 1564, 1567 (Fed. Cir. 1985). "An element in the accused product is equivalent to a claim limitation if the differences between the two are 'insubstantial' to one of ordinary skill in the art." *Eagle Comtronics, Inc. v. Arrow Comm'n Labs.*, 305 F.3d 1303, 1315 (Fed. Cir. 2002); *see also Sage Prods., Inc. v. Devon Indus., Inc.*, 126 F.3d 1420, 1423 (Fed. Cir. 1997) ("A claim element is equivalently present in an accused device if only 'insubstantial differences' distinguish the missing claim element from the corresponding aspects of the accused device.").

Plaintiffs, conceding that the all-elements rule applies in this case, argue that Defendants

apply a strict application of the doctrine of equivalents already rejected by the Federal Circuit in *Ethicon, supra,* because such an application would:

> [S]wallow the doctrine of equivalents, reducing the application of the doctrine to nothing more than a repeated analysis of literal infringement. Once a negative determination of literal infringement is made, that failure to meet a limitation would preclude a finding of infringement under the doctrine. The doctrine of equivalents would thus be rendered superfluous...because a finding of non-infringement would be foreordained when a court has already found that the accused subject matter does not literally fall within the scope of the asserted claim....[Thus] any analysis of infringement under the doctrine of equivalents necessarily deals with subject matter that is 'beyond,' 'ignored' by, and not included in the literal scope of a claim.

Ethicon, 149 F.3d at 1317.[7]

Plaintiffs argue that Defendants' argument against infringement by equivalents does not mention the function-way-result test (or any other test for insubstantiality) and merely amounts to a reiteration of the test for literal infringement.[8]

Proof of equivalence, intended to assist the trier of fact in understanding the technology and evidence at issue can come from any source, including expert testimony. *Graver Tank,* 339 U.S. at 609-610. "Like any other issue of fact, final determination requires a balancing of credibility, persuasiveness and weight of evidence." *Id*. Plaintiffs argue that this is such a case where expert

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[7] "Such subject matter is not necessarily 'specifically excluded' from coverage under the doctrine unless its inclusion is somehow inconsistent with the language of the claim. Literal failure to meet a claim limitation does not necessarily amount to 'specific exclusion'." *Ethicon,* 149 F.3d at 1317 (citations omitted).

[8]Defendants respond that Plaintiffs focus on the *result* aspect of the function-way-result test and fail to properly consider the narrowness of the invention by suggesting that the physical location of the switch, the lack of ports on the alleged switching device, and the omission of electromechanical switches are insubstantial or immaterial. (Def.'s Repl. Br. at 3, citing Xydis Decl. 2, ¶¶13-20, 27-32, 21-26). Defendants also point out that Plaintiffs' expert ignores the way in which the 3 ports of the switching means performs its function- which is by use of telephone compatible lines.

testimony is essential to assist the Court, and the trier of fact, understand the technology and evidence of this case.

Plaintiffs additionally present Dr. Thomas G. Xydis' conclusions based on his own application of the function-way-result test as creating a genuine issue of material fact as to equivalence. According to Plaintiffs, Dr. Xydis has found only insubstantial differences between the claim elements of the '911 patent and the alleged corresponding portions of the accused MFPs.[9] Pl.'s Resp. Br. at 9.

b. Switching Means as Separate and Distinct[10]

Plaintiffs present a function-way-result analysis under the doctrine of equivalents using this Court's construction of the switching means element of the '911 patent as being separate and distinct from the computer as well as the facsimile transceiver.[11] In the accused MFPs, the switching means is located within the outer housing of the MFP. (Pl.'s Br. at 10, citing Exh. 2, Xydis Decl., ¶ 13). Plaintiffs argue that Dr. Xydis' declaration and the above legal analysis support Plaintiffs' assertion that the corresponding structure's location inside the accused MFPs is of no consequence. *Id*. ¶14.

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[9]Plaintiffs state that Dr. Xydis has reviewed a) the Court's Memorandum Opinion and Order Re: Claim Construction and Notice Setting Status Conference, Dated October 8, 2004; b) Defendants' Joint Motion for Summary Judgment of Non-Infringement dated January 7, 2005 and all of its attachments; and, c) operator's manuals, service manuals and other documents Defendants have made available concerning the design and operation of the MFPs at issue in this case.

[10]Plaintiffs respond to Defendants' interpretation of "separate and distinct" as referring to the physical location of the switching means element without acquiescing in this interpretation.

[11]Plaintiffs respond to the Defendants' argument that the term "separate and distinct" in the Court's Opinion requires "a switch of a very specific construction that is placed between the fax and the computer" (*See* Defs.' Br. at 17) without acquiescing in this interpretation since, Plaintiffs argue, it is not expressly set forth in the this Court's prior Order.

Function. Plaintiffs argue that the switching means, as defined by this Court, and the switching means of the accused devices perform substantially the same function. According to Plaintiffs, the function of the claimed "switching means" is to change from various switching states such that "(i) the serial interface is connected to the third port (i.e. for coupling the telephone line); (ii) the facsimile transceiver is connected to the third port (i.e. for coupling to the telephone line); and (iii) the facsimile transceiver is connected to the serial interface." Pl.'s Br., p. 10. Plaintiffs argue that the physical location of the switching means does not affect the underlying function of the device (*see* Exh. 2, Xydis Decl. ¶14) and that the corresponding structure in the accused devices, which includes integrated circuit, semiconductors and conductors, and also assumes various switching states, performs substantially the same function as the switching means as interpreted by this Court. *Id*. ¶15.

Way. Plaintiffs' argue that the switching means, as interpreted by this Court, and the switching means of the accused devices perform the above function in substantially the same way. Both devices, Plaintiffs argue, selectively bridge the proper ports such that electrical signals representing information can be sent from port to port and thus between corresponding components. *Id*. ¶16. Both the accused devices and the switching means as defined by this Court, Plaintiff argues, perform the function of changing switching states to create the desired connection in response to electrical signals sent from the computer as set forth in Claim 1 of the '911 patent. *Id.* ¶17.

Result. Plaintiffs' argue that both the accused devices and the switching means of the '911 patent, as interpreted by this Court, obtain substantially the same result depending on the necessary switching state. As set forth in the claim, the result is "(i) for enabling communication between the computer and the telephone line; (ii) for enabling communication between the facsimile transceiver

and the telephone line; and (iii) for establishing communication between the computer and the facsimile transceiver. *Id*. ¶19.

Plaintiffs argue that since the accused devices and the switching means defined by this Court perform substantially the same function, in substantially the same way, to obtain substantially the same result, they are substantially the same under the doctrine of equivalents. Plaintiffs also point to Dr. Xydis' opinion that one of ordinary skill in the art would view the switching means as defined by this Court and the corresponding structure of the accused devices as insubstantially different. *Id*. ¶20.

c. Types of Switching Devices Used

Plaintiffs argue Dr. Xydis' conclusions, based on his application of the function-way-result test of the types of switching devices used (solid-state components, i.e., integrated circuits, transistors, etc.) in the switching means of the accused MFPs and the electromechanical switches of this Court's interpretation of the claim elements of the '911 patent support a finding of equivalence between those devices. *Id*. ¶¶21, 26.

Function. Plaintiffs argue that their claimed electromechanical switches, as interpreted by this Court, and the solid-state switching devices of the Defendants' MFPs perform substantially the same function. *Id*. ¶22 (To switch the path of an electrical signal representing information between different "ports.").

Way. Plaintiffs further argue that their electromechanical switches, as interpreted by this Court, and the solid-state switching devices in the accused MFPs, perform their function in substantially the same way by "selectively allowing or denying the flow of electrical signals (which represent information) in response to another electrical signal (either specific voltage or current)."

Pl.'s Br. at 12, citing Exh. 2, Xydis Decl., ¶ 23.

Result. Plaintiffs argue that the electromechanical devices, as interpreted by this Court, and the solid-state switching devices in the accused MFPs enable substantially the same result by allowing communication among the various ports, as claimed. Exh. 2, Xydis Decl., ¶ 24.

According to Plaintiffs, the above analysis indicates that the electromechanical switches and the solid-state switching devices perform substantially the same function, in substantially the same way to obtain substantially the same result, and are therefore equivalents. *Id.* at ¶ 25.

d. The "Ports" Used in the Switching Means

This Court defined "ports" to be sockets into which an external device can be plugged and that are configured to receive a telephone-compatible line. 10/8/04 Opinion at 22. Plaintiffs argue that the "ports" of the accused MFPs are specific electrical conductors inside the MFP. Pl.'s Br. at 13, citing Exh. 2, Xydis Decl., ¶ 27.[12]

Function. Plaintiffs argue that all of the "ports" in the accused MFPs interface to the "switching means" (solid-state switching devices) in the accused MFPs and serve each of the claimed port's respective function. Exh. 2, Xydis Decl., ¶ 28. Specifically, Plaintiffs claim that

> particular conductors inside the MFPs constitute a first "port," and have a function of providing an interface for the switching means to the 'serial interface' of the accused MFPs. Other of the particular conductors in the accused MFPs constitute a second port and have a function of providing an interface for the switching means to the

[12]Defendants argue that Dr. Xydis' inability to point to the specific conductors acting as "ports" indicates that his conclusions are insufficient to create a genuine issue of material fact and, furthermore, that Dr. Xydis fails to support his conclusion that the unidentified conductors (ports) perform their function in substantially the same way. *See Honeywell Int'l, Inc. v . Universal Avionics Sys. Corp.*, 347 F. Supp. 2d 129 (D. Del. 2004). Plaintiffs counter that Dr. Xydis' conclusions are not more general in nature than Defendants' expert witnesses and that Defendants have failed to point to evidence contradicting Dr. Xydis' function-way-result conclusions. Pl.'s Repl. Br. at 3 citing Sturges Decl. ¶2, Sarkis Decl. ¶¶ 2, 32-36

> facsimile transceiver of the accused MFPs. Still other of the particular conductors in the accused MFPs constitute a third port and have a function of providing an interface for the switching means to the telephone line. Pl.'s Br. at 13, citing Exh. 2, Xydis Decl., ¶ 28.

Way. Plaintiffs argue that the above discussed particular conductors inside the MFPS serve the connectivity function in substantially the same way as the first, second, and third ports as construed by this Court. Exh. 2, Xydis Decl., ¶ 29.

Result. Plaintiffs argue that the result achieved by the ports of the '911 patent, as construed by this Court, and the respective particular conductors of the accused MFPs is connectivity between a device (the serial interface or computer, the facsimile transceiver and the telephone line) and the switching means. Exh. 2, Xydis Decl., ¶ 30

Plaintiffs conclude that the foregoing analysis and Dr. Xydis' conclusion that the differences between the sockets configured to receive telephone-compatible lines and the particular conductors of the accused MFPs are insubstantial, supports a finding of equivalence. *Id*.

e. Location of the Switching Means

Plaintiffs argue that Defendants' focus on the location of the switching device as dispositive of doctrine of equivalents infringement is part of a rigid analysis already disregarded under *Ethicon*, *supra*. Plaintiffs argue that the real issue is whether there are insubstantial differences between the claim elements of the '911 patent, as interpreted by this Court, and the corresponding accused devices both of which were properly addressed by Dr. Xydis.

Plaintiffs support their position citing *Miles Lab. v. Shandon Inc.*, 997 F.2d 870 (Fed Cir. 1993), where a single cabinet for an apparatus was deemed infringed, under the doctrine of equivalents' function-way-result analysis, by a single cabinet which was split into three separate modules. The Federal Circuit found that the accused device's three separate modules satisfied the

function-way-result test when compared to the single cabinet of the patent claim. *Id.* at 876-77.

Plaintiffs argue that the facts of this case are most akin to the facts presented in *Optical Disc Corp. v. Del Mar Avionics*, 208 F.3d 1324 (Fed. Cir. 2000), where the Federal Circuit vacated the trial court's grant of summary judgment for defendants on the issue of infringement under the doctrine of equivalents.[13] *Id.* at 1333, 1336. The court looked to the declaration and inspection report of the plaintiff's expert, which conflicted with evidence from defendant's expert, and found a genuine issue of material fact existed as to infringement under the doctrine of equivalents. *Id.* The Federal Circuit found that a finder of fact, based on expert testimony, could find that the differences between the accused device and the claimed invention were insubstantial and, therefore, "could find infringement by equivalents." *Id.* at 1336; s*ee also Overhead Door Corp. v. The Chamberlain Group, Inc.*, 194 F.3d 1261, 1270 (Fed. Cir. 1999) (Vacating grant of summary judgment as to infringement under the doctrine of equivalents because statements of plaintiff's expert witness show a genuine issue of material fact precluding summary judgment.).

3. The Court's Findings

This Court finds that there is a genuine issue of material fact as to whether the accused MFPs infringe Claim 1 of the '911 patent, as construed by this Court, under the doctrine of equivalents and denies Defendants' Joint Motion for Summary Judgment of Non-Infringement.

a. Separate and Distinct Switching Means

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[13]The Court notes that Plaintiffs mistakenly stated that the Federal Circuit in *Optical, supra*, affirmed the trial court's denial of defendants' summary judgment motion. The trial court granted defendants' motion for summary judgment on non-infringement. The Federal Circuit, on appeal, vacated all of the lower court's judgments of non-infringement under the doctrine of equivalents and remanded the case for an analysis under the doctrine of equivalents. *Optical Disc*, 208 F.3d at 1339.

Although Defendants argue very strongly that a switching means which is "separate and distinct" from a facsimile transceiver must be outside and between a computer and the accused device, such was not a requirement or limitation set forth in this Court's claim construction. A finder of fact could conclude that the accused devices' switching means are "separate and distinct" from both the MFP and the computer even though the switching means is within the physical boundaries of the MFP itself. A finder of fact could also conclude that the physical location of Plaintiffs' switching means being between the fax machine and computer, versus within the physical boundaries of the MFP, is an insubstantial difference. Dr. Xydis concluded the differences between the accused switching means and the switching means of Claim 1 are insubstantial in light of the fact that one of ordinary skill in the art may still view the switching means as separate and distinct, regardless of physical location of the switching means. Defendants have not argued that the physical location of the switching means would affect the function-way-result analysis of the switching means, and since a trier of fact could find that the claim limitation requiring "separate and distinct" switching means is met in the MFPs, a finding of equivalence would not overextend the doctrine of equivalents or violate the all-limitations rule.

b. Types of Switching Devices Used

This Court finds that a genuine issue of material fact exists as to whether there are insubstantial differences between the accused solid-state component of the accused devices and the claim electromechanical switches.

Dr. Xydis has concluded that both the accused and the claimed devices perform substantially the same function, in substantially the same way, and achieve substantially the same result. This Court takes note of Defendants' argument that Dr. Xydis' conclusions failed to state 'why' the

function, way, and result of the accused and claimed devices are substantially the same, but declines to follow *Honeywell Int'l, Inc. v. Universal Avionics Sys. Corp.,* 347 F. Supp. 2d. 129 (D. Del. 2004). The Federal Circuit has not yet held that such is required under the function-way-result analysis for infringement under the doctrine of equivalents. Dr. Xydis, as one of ordinary skill in the art, has concluded that the differences cited by Defendants' are insubstantial, and that Defendants' expert has come to a different conclusion based on the same information. This difference creates a genuine issue of material fact.

c. The "Ports" Used in the Switching Means

This Court finds that there exists a genuine issue of material fact as to whether the "ports" of the accused device are substantially the same as the port of the switching means claimed in the '911 patent under function-way-result analysis.

Again, Defendants' argument that Dr. Xydis has not specified the actual conductors which are equivalent to the claimed ports is noted. However, Defendants do not dispute this point by claiming that such conductors do not exist. There remains a genuine issue of material fact to be resolved by the trier of fact.

In *Overhead Door, supra*, the Federal Circuit vacated the trial court's summary judgment of non-infringement under the doctrine of equivalents finding that plaintiff's expert created a genuine issue of material fact by averring that it was known in the computing art that "'[a]ny software process can be transformed into an equivalent software process.'" *Overhead Door,* 194 F.3d at 1269 (citations omitted). Plaintiff filed a declaratory judgment action and argued that its "software pointer" used to select date storage locations on a microprocessor did not infringe the hardware switch used to select storage locations on a micro processor system. *Id.* at 1269. The

court noted that the difference may have been a matter of choice, and that one of skill in the art would view the "alternative systems as interchangeable substitutes." *Id*. at 1270. The court further noted:

> In discerning this genuine factual issue, this court also considered the district court's interpretation that a mechanical switch would necessarily require a human operator. In operation of a mechanical switch, a human operator would indeed set the memory selection switch to one of five positions. This "user operated" characteristic of a mechanical switch, however, would not necessarily preclude a finding that software performs equivalently without human operation. Indeed in other contexts, this court has note the interchangeability of hardware and software. *See, e.g., Pennwalt Corp. v. Durand-Wayland, Inc.*, 833 F.2d 931, 935, 4 U.S.P.Q.2d 1737, 1740 (Fed. Cir. 1987) (*en banc*) ("If...the accused devices differ only in substituting a computer for hard- wired circuitry, [the patentee] might have a stronger position for arguing that the accused devices infringe the claims."). Moreover the Supreme Court has acknowledged that interchangeability can be one of the hallmarks of an equivalent. *See Warner-Jenkinson*,[supra] at 37 ("known interchangeability...for an element of a patent is one of the express objective factors...bearing upon whether the accused device is substantially the same as the patented invention"); *Graver Tank*, [supra] at 609 ("An important factor [in determining equivalency is whether persons reasonably skill in the art would have known of the interchangeability...")

Id.

The concurring opinion in *Johnson & Johnston Assoc., Inc. v. R.E. Service Co., Inc.*, 285 F.3d 1046 (Fed. Cir. 2002) states that the doctrine of equivalents is not intended to aid a patentee in winning a claim of infringement over elements which could have been claimed but were not. *Id*. at 1056. However, if the technology, Plaintiffs assert, infringes the '911 was subsequently developed, then this issue is properly within the scope of doctrine of equivalents analysis. *See Pennwalt Corp. v. Durand-Wayland, Inc.*, 833 F.2d 931, 938 (Fed. Cir. 1987) (*en banc*); *see also Sage Prods.*, 126 F.3d at 1423.

F. Prior Art and Prosecution History Estoppel[14]

Defendants incorporate their discussion regarding the scope of prior art and the issue of prosecution history estoppel from a prior motion to support their argument that summary judgment should be granted in their favor. Defendants' reference to these arguments in their current motion for summary judgment is insufficient to properly bring these issues before the Court for consideration.[15] Though Defendants elaborate on these arguments in their reply brief, a substantive argument should not be raised in a reply brief because the responding party is not given an opportunity to respond to the argument. See Fed. R. Civ. P. 7(b), see also E.D. Mich L.R. 7.1. Because Plaintiffs submitted a surreply brief on the issue, the Court will consider the arguments raised by Defendants on this issue.

Prosecution history estoppel is a defense to infringement. *Warner-Jenkinson*, 520 U.S. at 40. If the patent-holder demonstrates that an amendment required during prosecution had a purpose unrelated to patentability, a court must consider that purpose in order to decide whether an estoppel is precluded. *Id.* at 40-41. If the patent-holder is unable to establish such a purpose, a court should presume that the purpose behind the required amendment is such that prosecution history estoppel would apply. *Id.* at 41. The patent-holder's explanation is considered to determine whether the patent-holder gave up any element of the claim for purposes of patentability. *Insituform Technologies, Inc. v. CAT Contracting, Inc.*, 161 F.3d 688, 691-92 (Fed Cir. 1998).

Defendants claim that prosecution history estoppel bars application of the doctrine of

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[14]This issue is briefly addressed mostly in reference, in Defendants' Original motion for summary judgment.

[15]These arguments were originally dismissed as moot in light of this Court's claim construction. See Order at 2.

equivalents to expand the scope of the claimed "switching means" to cover circuitry within the accused fax products or to expand the scope of the claimed "port" to include sockets which are not telephone line compatible. Defendants claim that during the prosecution of the '911 patent, the examiner rejected all pending claims based on prior art, under 25 U.S.C. § 102(3), as being anticipated by the Koshiishi U.S. Patent No. 4,652,933. In response to the prior art rejection, Defendants claim Kirsch distinguished the '911 patent over the Koshiishi prior art by arguing that the '911 patent requires no modification to a conventional facsimile machine to include interface circuitry.

In response, Plaintiffs claim that Defendants were selective in their quotation of the file history relative to the Koshiishi patent. When read in context, Plaintiffs claim that the reference to the "serial interface" element of the claim in describing why the existing claim language "serial interface" defined novel and non-obvious subject matter over Koshiishi and does not apply to the "facsimile transceiver" element that incorporates switching circuitry. Even if prosecution history estoppel were to apply, Plaintiffs claim it would affect the serial interface element of the claim and not the facsimile transceiver that incorporates switching circuitry, citing *Festo Corp. v. Shoketsu Kinzoku Kogyo Kabushiki Co., Ltd.*, 535 U.S. 722, 740 (2002) (prosecution history "'bar[s] the application of the doctrine of equivalents as to that element.").

Because the purpose of the amendment was related to patentability of the '911 patent, prosecution history estoppel applies. The Plaintiffs' response to the Examiner was:

> Claims 1 and 3-7 are presently pending in this application. By this Amendment Claim 1 has been amended and Claim 2 cancelled. Reconsideration is respectfully requested.
>
> The Examiner has rejected all claims under 35 U.S.C. § 102 in view of Koshiishi. Koshiishi relates to a facsimile machine which

may be connected to a personal computer by means of a parallel data cable CAB. The Koshiishi system uses an input/output interface (IFP) and a computer interface (IFF) to connect the personal computer 1 with the facsimile machine 10. A system control unit (SCU), about which little detail is given, controls the operation of the facsimile machine and the various interfaces.

The Applicants' invention is an information station which employs a facsimile transceiver and computer to effect three modes of operation. In the first mode the computer is connected to transmit over a telephone line. In the second mode the facsimile transceiver may transmit over the telephone line. In the third mode the computer communicates with the facsimile transceiver to receive and store information from the facsimile transceiver. The Applicants' invention can be implemented using conventional facsimile transceivers and without requiring such transceivers to be modified to include the parallel interface circuitry embodied in Koshiishi's computer interface circuit IFF.

Whereas Koshiishi advocates and uses parallel data transmission (implemented by the IFF and IFP circuits of Figure 3) the Applicants' invention communicates using a serial interface. Thus the Applicants' invention is ideally adapted for use with the conventional facsimile transceivers which communicate serially with the telephone network interface. In order to cause the facsimile transceiver to communicate directly with the computer in the third mode of operation, the Applicants' invention includes a current source means for selectively providing current to the facsimile transceiver in order to simulate the connection of a telephone line to the facsimile transceiver. In this fashion, the Applicants' invention permits the facsimile transceiver to convey information to the computer to be stored, all without modification to the facsimile transceiver. Koshiishi is quite a bit different in this respect, since Koshiishi establishes a special parallel data connection between its modified facsimile apparatus and the personal computer. Koshiishi does not teach or discuss the mechanism employed by the Applicants' invention to simulate the connection of a telephone line to the facsimile transceiver.

In order to more fully distinguish the Applicants' invention from the reference of record, Claim 1 has been amended to incorporate the language of dependent Claim 2 which recites the Applicants' current source means for simulating the connection of a telephone line to the facsimile transceiver. The Applicants would

> also note that Claim 1, as originally filed, also contained a recitation of a serial interface, which further distinguishes the Applicants' invention from the Koshiishi reference.
>
> In view of these differences, it is respectfully submitted that Claim 1 now fully distinguishes over the reference of record and is therefore allowable. Accordingly, allowance of this claim and all remaining claims dependent therefrom is courteously solicited.

(Exh. 1 to Sur-Reply)

Plaintiffs' response and amendment to the '911 patent application does not address the "switching means" element specifically as argued by Defendants. Plaintiffs distinguished its invention from Koshiishi by noting that Koshiishi uses parallel data transmission implemented by the IFF and IFP circuits, whereas, Plaintiffs' invention communicates using a "serial interface." Plaintiffs' response indicates that the invention permits the facsimile transceiver to convey information to the computer without modification to the facsimile transceiver. Plaintiffs' response does not expressly state that the "switching means" element is the same as Koshiishi's parallel data transmission implemented by the IFF and IFP circuits. Prosecution history estoppel does not bar Plaintiff's claim as to the "switching means" element under the doctrine of equivalents.

G. Subsequently Added Accused Devices

On November 29, 2004, Plaintiffs identified several new products on which they request sales information but failed to supply the Defendants with claim charts as required under the Court's Second Amended Scheduling Order. Plaintiffs do not contradict these statements or offer any explanation as to why they have not provided the necessary claim charts. Plaintiffs claim that the list provided was for the purpose of settlement discussions. For purposes of the summary judgment motion, the subsequently identified devices are not currently before the Court because there are no claim charts to support these devices.

III. CONCLUSION

For the reasons set forth above, the Court denies Defendants' Joint Motion for Summary Judgment. Accordingly,

In Case No. 00-CV-72773:

IT IS ORDERED that Defendants' Joint Motions for Summary Judgment **(Docket No. 66, filed January 7, 2005 and Docket No. 69, filed January 10, 2005)** are DENIED.

IT IS FURTHER ORDERED that Plaintiffs' Motion for Leave to File Surreply Brief **(Docket No. 77, filed March 4, 2005)** is GRANTED.

In Case No. 00-CV-72774:

IT IS FURTHER ORDERED that Defendants' Joint Motion for Summary Judgment **(Docket No. 57, filed January 7, 2005)** is DENIED.

IT IS FURTHER ORDERED that the Ex Parte Motion for Leave to File Excess Pages **(Docket No. 60, filed February 22, 2005)** is GRANTED.

IT IS FURTHER ORDERED that Plaintiffs' Motion for Leave to File Surreply Brief **(Docket No. 62, filed March 4, 2005)** is GRANTED.

In Case No. 00-CV-72775:

IT IS FURTHER ORDERED that Defendants' Joint Motion for Summary Judgment **(Docket No. 19, filed January 7, 2005)** is DENIED.

IT IS FURTHER ORDERED that the Ex Parte Motion for Leave to File Excess Pages **(Docket No. 23, filed February 22, 2005)** is GRANTED.

IT IS FURTHER ORDERED that Plaintiffs' Motion for Leave to File Surreply Brief **(Docket No. 25, filed March 4, 2005)** is GRANTED.

In Case No. 00-CV-72778:

IT IS FURTHER ORDERED that Defendants' Joint Motion for Summary Judgment **(Docket No. 38, filed January 7, 2005)** is DENIED.

IT IS FURTHER ORDERED that the Ex Parte Motion for Leave to File Excess Pages **(Docket No. 41, filed February 22, 2005)** is GRANTED.

IT IS FURTHER ORDERED that Plaintiffs' Motion for Leave to File Surreply Brief **(Docket No. 43, filed March 4, 2005)** is GRANTED.

IT IS FURTHER ORDERED that a Final Pretrial Conference be held in this matter on **Monday, October 24, 2005.** The proposed Joint Final Pretrial Order must be submitted to Chambers by **October 20, 2005.** All parties with authority to settle must appear at the conference. The trial date will be scheduled at the conference.

/s/ DENISE PAGE HOOD
DENISE PAGE HOOD
United States District Judge

DATED: September 21, 2005